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=> e raaijmakers harry/au
E1            4     RAAIJMAKERS HANS/AU
E2            3     RAAIJMAKERS HANS C A/AU
E3            1 --> RAAIJMAKERS HARRY/AU
E4           10     RAAIJMAKERS HARRY W C/AU
E5            1     RAAIJMAKERS HENDRICUS WILHELMUS CAROLINA/AU
E6            8     RAAIJMAKERS HENRICUS WILHELMUS CAROLINA/AU
E7            6     RAAIJMAKERS I J/AU
E8            1     RAAIJMAKERS I J J M/AU
E9            9     RAAIJMAKERS I J M M/AU
E10          56     RAAIJMAKERS IVO/AU
E11          19     RAAIJMAKERS IVO J/AU
E12          11     RAAIJMAKERS IVO J M M/AU

=> s e3-e4
              1 "RAAIJMAKERS HARRY"/AU
             10 "RAAIJMAKERS HARRY W C"/AU
L1           11 ("RAAIJMAKERS HARRY"/AU OR "RAAIJMAKERS HARRY W C"/AU)

=> e neeleman ernst/au
E1            6     NEELEMAN CHRIS/AU
E2            8     NEELEMAN E/AU
E3            6 --> NEELEMAN ERNST/AU
E4            3     NEELEMAN J F/AU
E5            2     NEELEMAN JAN/AU
E6            1     NEELEMAN JOHN/AU
E7            6     NEELEMAN L/AU
E8           27     NEELEMAN LYDA/AU
E9            5     NEELEMAN R/AU
E10           3     NEELEMAN RONALD/AU
E11           1     NEELEMAN STEPHEN D/AU
E12           3     NEELEMANS L/AU

=> s e2-e3
              8 "NEELEMAN E"/AU
              6 "NEELEMAN ERNST"/AU
L2           14 ("NEELEMAN E"/AU OR "NEELEMAN ERNST"/AU)

=> s l1 or l2
L3           24 L1 OR L2

=> l3 and (inulin or carboxyalkyl?)
         11186 INULIN
           131 INULINS
         11205 INULIN
                 (INULIN OR INULINS)
          5200 CARBOXYALKYL?
L4           6 L3 AND (INULIN OR CARBOXYALKYL?)
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=> d l4 1-6 ibib abs

L4 ANSWER 1 OF 6 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2008:722443 CAPLUS
DOCUMENT NUMBER: 149:55936
TITLE: Sugar phosphonates
INVENTOR(S): **Raaijmakers, Harry W. C.**; Van Bree, Jan H. J.; Devaux, Albert; Notte, Patrick P.
PATENT ASSIGNEE(S): Koninklijke Cooeperatie Cosun U.A., Neth.; Thermphos Trading GmbH
SOURCE: Eur. Pat. Appl., 14pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1932858	A1	20080618	EP 2006-25517	20061211
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, RS				
WO 2008071693	A2	20080619	WO 2007-EP63688	20071211
WO 2008071693	A3	20080821		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA				

PRIORITY APPLN. INFO.: EP 2006-25517 A 20061211
OTHER SOURCE(S): MARPAT 149:55936

AB Novel sugar phosphonates are disclosed containing a sugar moiety selected from selected polysaccharides, saccharides which are free of aldehyde and keto groups, sugar alcs. and monosaccharides and a phosphonate moiety selected from an alkylphosphonate and an alkylamino phosphonate. The novel compds. can be used beneficially in numerous established "phosphonate" applications including textile treatment, water treatment and oil recovery. Thus, 8.55 g of sucrose were mixed with 100 g of 50% aqueous NaOH solution, 25 g of water and 0.2 g of KI. To this solution was added under stirring 7.037 g of 3-chloropropyliminobis(methylenephosphonic acid). The mixture was heated under reflux for 10 h. 31P NMR anal. showed that 66% of the propyliminobis(methylenephosphonic acid) moiety was attached to sucrose and that 28% of the 3-chloroiminobis(methylenephosphonic acid) had been converted to the corresponding hydroxy derivative with about 3% of the chloroazetididium equivalent of the 3-chloropropyliminobis(methylenephosphonic acid).

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 2 OF 6 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2005:692116 CAPLUS
DOCUMENT NUMBER: 143:171858

TITLE: Method for the manufacture of **carboxyalkylinulin**

INVENTOR(S): **Raaijmakers, Harry W. C.**; **Neeleman, Ernst**

PATENT ASSIGNEE(S): Koninklijke Cooeperatie Cosun U. A., Neth.; Solutia Europe N. V./S. A.

SOURCE: Eur. Pat. Appl., 7 pp.
CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1559727	A1	20050803	EP 2004-75280	20040130
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
AU 2005209336	A1	20050811	AU 2005-209336	20050128
CA 2555205	A1	20050811	CA 2005-2555205	20050128
WO 2005073256	A1	20050811	WO 2005-BE11	20050128
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1713831	A1	20061025	EP 2005-700220	20050128
EP 1713831	B1	20080409		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK, IS				
CN 1914230	A	20070214	CN 2005-80003727	20050128
JP 2007532698	T	20071115	JP 2006-549794	20050128
AT 391731	T	20080415	AT 2005-700220	20050128
ES 2307140	T3	20081116	ES 2005-700220	20050128
US 20070225483	A1	20070927	US 2006-587878	20060727
IN 2006CN03143	A	20070608	IN 2006-CN3143	20060830

PRIORITY APPLN. INFO.: EP 2004-75280 A 20040130
WO 2005-BE11 W 20050128

AB The method comprises steps of: preparing an aqueous medium containing a haloalkylcarboxylate, adding to the resulting dispersion under substantially neutral pH conditions an **inulin**, heating the mixture to a temperature in the range of 60-90° and proceeding with the reaction at alkaline conditions, pH 8-12, while simultaneously adding addnl. halogenoalkylcarboxylate and alkali hydroxide. The **carboxyalkylinulin** so formed is recovered in a known manner.

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 3 OF 6 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1999:26490 CAPLUS

DOCUMENT NUMBER: 130:168584

TITLE: Modification of **inulin** with amidoxime groups and coordination with copper(II) ions

AUTHOR(S): Verraest, Dorine L.; Petersa, Joop A.; Kuzeeb, Hennie

C.; **Raaijmakers, Harry W. C.**; Van Bekkum, Herman
CORPORATE SOURCE: Laboratory of Organic Chemistry and Catalysis, Delft University of Technology, Delft, 2628 BL, Neth.
SOURCE: Carbohydrate Polymers (1998), 37(3), 209-214 CODEN: CAPOD8; ISSN: 0144-8617
PUBLISHER: Elsevier Science Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB **Inulin** modified with amidoxime groups was prepared by reaction of the nitrile groups of O-(cyanoethyl)**inulin** with hydroxylamine. This material has good chelating properties for Cu(II) ions. The coordination of the **inulin** derivative with Cu(II) has been studied using potentiometry, polarimetry and 17O NMR spectroscopy. At low molar ratio of Cu(II):amidoxime groups ($\rho L < 0.25$), stable complexes are formed. The optical rotation measurements indicate folding of the backbone to form intramol. complexes. At higher ρ values, no addnl. Cu(II) ions are bound by the polymeric ligand. Presumably, no defolding to form 1:1 Cu(II)-amidoxime complexes occurs.
REFERENCE COUNT: 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 4 OF 6 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1998:268715 CAPLUS
DOCUMENT NUMBER: 128:294969
ORIGINAL REFERENCE NO.: 128:58467a,58470a
TITLE: Synthesis of carbamoylethyl **inulin** and carboxyethyl **inulin**
AUTHOR(S): Verraest, Dorine L.; **Raaijmakers, Harry W. C.**; Kuzee, Hennie C.; Peters, Joop A.; Van Bekkum, Herman
CORPORATE SOURCE: Faculty Chemical Technology Material Science, Laboratory Organic Chemistry Catalysis, Delft University Technology, Delft, 2600 GA, Neth.
SOURCE: Starch/Staerke (1998), 50(2-3), 98-100 CODEN: STARDD; ISSN: 0038-9056
PUBLISHER: Wiley-VCH Verlag GmbH
DOCUMENT TYPE: Journal
LANGUAGE: English
AB **Inulin** etherified with carbamoylethyl groups and with carboxyethyl groups was prepared by hydrolysis of O-(cyanoethyl) **inulin.**

L4 ANSWER 5 OF 6 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1997:550155 CAPLUS
DOCUMENT NUMBER: 127:220890
ORIGINAL REFERENCE NO.: 127:43057a,43060a
TITLE: Distribution of substituents in O-carboxymethyl and O-cyanoethyl ethers of **inulin**
AUTHOR(S): Verraest, Dorine L.; Peters, Joop A.; Kuzee, Hennie C.; **Raaijmakers, Harry W. C.**; van Bekkum, Herman
CORPORATE SOURCE: Lab. Organic Chem. Catalysis, Delft Univ. Technology, Delft, 2628, Neth.
SOURCE: Carbohydrate Research (1997), 302(3-4), 203-212 CODEN: CRBRAT; ISSN: 0008-6215
PUBLISHER: Elsevier
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The distribution of substituents in O-carboxymethyl and O-cyanoethyl

ethers of **inulin** was studied using 13C NMR spectroscopy and HPLC anal. For both types of **inulin** derivs., the distribution of substituents can be described by the statistical model of Spurlin, showing that the substituents are uniformly distributed along the **inulin** chains and that the reactivities of the hydroxdyl groups in the sugar units are independent upon substitution of a neighboring hydroxyl group. The 4-position of the D-fructofuranoxyl units was found to be the most reactive in the etherifications.

REFERENCE COUNT: 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 6 OF 6 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1994:134959 CAPLUS
DOCUMENT NUMBER: 120:134959
ORIGINAL REFERENCE NO.: 120:23799a,23802a
TITLE: Preparation and catalytic hydrogenolysis of some ω-haloalkyl β-D-fructopyranosides; a convenient route to simple alkyl β-D-fructopyranosides
AUTHOR(S): **Raaijmakers, Harry W. C.**; Eveleens, Susan M.; Arnouts, Esther G.; Zwanenburg, Binne; Chittenden, Gordon J. F.
CORPORATE SOURCE: NSR Cent. Mol. Struct. Des. Synth., Univ. Nijmegen, Nijmegen, 6525 ED, Neth.
SOURCE: Recueil des Travaux Chimiques des Pays-Bas (1993), 112(9), 511-14
CODEN: RTCPA3; ISSN: 0165-0513
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 120:134959
AB The acid-catalyzed reactions of D-fructose, sucrose and **inulin** with ω-haloalkyl alcs. yield the corresponding β-D-fructopyranosides. Catalytic hydrogenolysis of these glycosides provides a simple route to some crystalline alkyl β-D-fructopyranosides of potential biol. interest.

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=> inulin and (carboxymethyl? or carboxyalkyl?)
         11186 INULIN
           131 INULINS
         11205 INULIN
                (INULIN OR INULINS)
         60526 CARBOXYMETHYL?
          5200 CARBOXYALKYL?
L5         206 INULIN AND (CARBOXYMETHYL? OR CARBOXYALKYL?)

=> l5 and prep/rl
       4745611 PREP/RL
L6          46 L5 AND PREP/RL

=> d l6 1-46 ibib abs

L6 ANSWER 1 OF 46 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2009:217255 CAPLUS
DOCUMENT NUMBER: 150:290087
TITLE: Application of carboxymethyl inulin compound as hygroscopic and moisturizing agent
INVENTOR(S): Guo, Zhanyong; Liu, Jingli; Dong, Fang; Miao, Fengping; Yang, Shaoli
PATENT ASSIGNEE(S): Yantai Institute of Coastal Zone Research for
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Sustainable Development, Peop. Rep. China
SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 7pp.
CODEN: CNXXEV
DOCUMENT TYPE: Patent
LANGUAGE: Chinese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 101366686	A	20090218	CN 2008-10140181	20080905
PRIORITY APPLN. INFO.:			CN 2008-10140181	20080905

AB This invention relates to the application of **carboxymethyl inulin** compound as hygroscopic and moisturizing agent. **Carboxymethyl inulin** compound has strong hygroscopic and moisturizing ability, and is promising in replacing expensive hyaluronic acid as hygroscopic and moisturizing agent used in cosmetics. The synthesis method of **carboxymethyl inulin** compound is also provided.

L6 ANSWER 2 OF 46 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2008:1281869 CAPLUS
DOCUMENT NUMBER: 149:515776
TITLE: Inhibitory Effects of Multicomponent, Phosphonate-Grafted, Zwitterionic Chitosan Biomacromolecules on Silicic Acid Condensation
AUTHOR(S): Demadis, Konstantinos D.; Ketsetzi, Antonia; Pachis, Konstantinos; Ramos, Viviana M.
CORPORATE SOURCE: Crystal Engineering, Growth and Design Laboratory, Department of Chemistry, University of Crete, Heraklion, Crete, GR-71003, Greece
SOURCE: Biomacromolecules (2008), 9(11), 3288-3293
CODEN: BOMAF6; ISSN: 1525-7797
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
AB This article reports the inhibitory effects of phosphonated chitosan (PCH, synthesized from chitosan (CHS) by a Mannich-type reaction) on the in vitro silicic acid condensation. In particular, the ability of PCH to retard silicic acid condensation in aqueous supersatd. solns. at circumneutral pH is studied. Furthermore, the effect of anionic **carboxymethyl inulin** (CMI) polyelectrolyte on the inhibitory activity of PCH is systematically studied. It was discovered that when PCH is added in dosages up to 150 ppm, it can inhibit silicic acid condensation, thereby maintaining soluble silicic acid up to 300 ppm (for 8 h, from a 500 ppm initial stock solution). The addition of CMI to working solns. that already contain PCH can further enhance the inhibitory action of PCH. A combination of 150 ppm PCH and 100 ppm CMI maintains 400 ppm soluble silicic acid for 8 h. PCH and CMI combinations also affect colloidal silica particle morphol.
REFERENCE COUNT: 83 THERE ARE 83 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 3 OF 46 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2007:1415187 CAPLUS
DOCUMENT NUMBER: 148:39697
TITLE: Suspension stabilizer for gastrointestinal contrast agents, and gastrointestinal contrast agents containing the stabilizer
INVENTOR(S): Sato, Keiichi

PATENT ASSIGNEE(S): Daiichi Kogyo Seiyaku Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 8pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2007320928	A	20071213	JP 2006-154603	20060602

PRIORITY APPLN. INFO.: JP 2006-154603 20060602

AB The invention relates to a stabilizer for a suspension containing a gastrointestinal contrast agent, wherein the agent contains a **carboxymethyl inulin** metal salt with an ether degree 0.7-1.5 and a viscosity of the 10 % solution of the anhydrous agent 5-20 mPa·s. A gastrointestinal contrast agent suspension containing the stabilizer having improved suspension stability with minimized viscosity variation is also disclosed. For example, **carboxymethyl inulin** sodium salt was prepared, and its 4.8 g was dissolved in water 144 mL. Then, barium sulfate 240 g was added to the solution, and dispersed to obtain a suspension (sol) composition

L6 ANSWER 4 OF 46 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2007:455592 CAPLUS
DOCUMENT NUMBER: 146:447654
TITLE: Discoloration-free, oil-in-water emulsion-type cosmetics containing dibenzoylmethanes and their use for sunscreens
INVENTOR(S): Omori, Takashi; Nasu, Akio
PATENT ASSIGNEE(S): Shiseido Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 26pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2007106714	A	20070426	JP 2005-300653	20051014

PRIORITY APPLN. INFO.: JP 2005-300653 20051014

AB Title cosmetics contain hydrophobized powders, dibenzoylmethanes, HOCH2CH(OH)CH2O[CH2CH[O(AO)nR1]CH2O]mCH2CH(OH)CH2OH (1 ≤ m ≤ 4; R1 = C1-4 hydrocarbyl, H; AO = C3-4 oxyalkylene; 1 ≤ m + n ≤ 200), and A(O2CNHR1)s (A = fructose residue; R1 = C3-22 hydrocarbyl; s = 0.10-2.0). Thus, sunscreen cream containing Inutec SP 1 (**inulin** N-alkylurethane), hydrophobized TiO2, hydrophobized ZnO, 4-tert-butyl-4'-methoxydibenzoylmethane, polyoxybutylene Me triglyceryl ether, octyl p-methoxycinnamate, Me Ph polysiloxane, etc., was stored at 50° for 1 mo to show no discoloration. The cream also showed good dispersion stability, emulsion stability, and moisturizing effect with no stickiness.

L6 ANSWER 5 OF 46 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2007:220916 CAPLUS
DOCUMENT NUMBER: 146:253937
TITLE: Efficient manufacture of **carboxymethyl inulin** metal salts
INVENTOR(S): Sato, Keiichi; Hayashi, Takayuki

PATENT ASSIGNEE(S): Daiichi Kogyo Seiyaku Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 9pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2007051249	A	20070301	JP 2005-238835	20050819
PRIORITY APPLN. INFO.:			JP 2005-238835	20050819

AB The manufacturing method includes treating **inulin** with 0.5-10 mol (based on 1 mol D-fructose units) metal compds. in hydrous organic solvents and etherifying so as to form **carboxymethyl** ethers. Thus, dissolving 4.2 mol NaOH in 20/80 mixture of water and iso-Pr alc., adding **inulin** (Frutafit HD), reacting, adding 2.0 mol monochloroacetic acid, and etherifying gave a **carboxymethyl inulin** sodium salt showing viscosity of 5% aqueous solution 94 mPa-s and degree of substitution 1.45.

L6 ANSWER 6 OF 46 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2006:702931 CAPLUS
DOCUMENT NUMBER: 145:123155
TITLE: Enzyme production by fermentation of immobilized or insolubilized substrates
INVENTOR(S): Call, Hans-Peter
PATENT ASSIGNEE(S): Call, Krimhild, Germany
SOURCE: Ger. Offen., 9 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 102005001331	A1	20060720	DE 2005-102005001331	20050111
PRIORITY APPLN. INFO.:			DE 2005-102005001331	20050111

AB A new procedure for cultivation of microorganisms in either submerged or sold-state fermns. is provided. The technique is characterized by the fact that the active soluble substrates are made insol. either phys. or chemical modification by heating, crosslinking or encapsulation. The immobilized substrate then slowly becomes available to the microorganism during the fermentation as it degrades insol. substrate.

L6 ANSWER 7 OF 46 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2006:344145 CAPLUS
DOCUMENT NUMBER: 145:243693
TITLE: Purification and biochemical properties of a new thermostable xylanase from symbiotic fungus, Termitomyces sp
AUTHOR(S): Faulet, Betty Meuwiah; Niamke, Sebastien; Gonnety, Jean Tia; Kouame, Lucien Patrice
CORPORATE SOURCE: Laboratoire de Biochimie et Technologie des Aliments de l'Unite de Formation et de Recherche en Sciences et Technologie des Aliments de l'Universite d'Abobo-Adjame, Abidjan, 02, Cote d'Ivoire
SOURCE: African Journal of Biotechnology (2006), 5(3), 273-282

CODEN: AJBFAH; ISSN: 1684-5315
URL: http://www.academicjournals.org/AJB/PDF/pdf2006/2 Feb/Faulet%20et%20al.pdf
PUBLISHER: Academic Journals
DOCUMENT TYPE: Journal; (online computer file)
LANGUAGE: English

AB A endo-1,4-β-xylanase (I) was purified from the symbiotic fungus Termitomyces sp. of the termite Macrotermes subhyalinus by DEAE-Sepharose CL-6B and CM-Sepharose CL-4B chromatog., gel-filtration on Sephacryl S-200 HR, and chromatog. on phenyl-Sepharose CL-4B. The I preparation was shown to be homogeneous by PAGE. Purified I displayed 2 protein bands on SDS-PAGE and its mol. weight was estimated to 80-87 kDa. I exhibited maximum activity at 65-70° and pH 5.6, and it retained >80% of its activity in the pH range of 5.0-6.0. I was stable for a long time period at temps. of ≤50° and for 1 h at 60°. Although I exhibited lower **carboxymethylcellulase** activity, it lacked activity toward substituted xylans, xylobiose, **inulin**, starch, polygalacturonic acid, or p-nitrophenyl glycosides. The I kinetic parameters indicated higher efficiency in the hydrolysis of beechwood xylan and birchwood xylan. I was stimulated by K+, Mn2+, and dithiol-reducing agents, and was sensitive to Cu2+, Fe2+, Zn2+, and detergents. I activity was observed in presence of urea up to 1% concentration I could also be used in the presence of organic solvents such as acetone or dioxane (5%) without loss of activity. The properties of I make it potentially useful for biotechnol. applications and for biobleaching in the pulp and paper industry.

REFERENCE COUNT: 45 THERE ARE 45 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 8 OF 46 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2006:170539 CAPLUS
DOCUMENT NUMBER: 144:260098
TITLE: Cosmetic compositions comprising new amphoteric polysaccharide compounds with a sulfonate group
INVENTOR(S): Philippe, Michel
PATENT ASSIGNEE(S): L'Oreal, Fr.
SOURCE: Fr. Demande, 30 pp.
CODEN: FRXXBL
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2874380	A1	20060224	FR 2004-8996	20040819
FR 2874380	B1	20061124		
WO 2006018327	A2	20060223	WO 2005-EP9991	20050819
WO 2006018327	A3	20060504		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,

GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

EP 1778731 A2 20070502 EP 2005-798113 20050819
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR

JP 2008514736 T 20080508 JP 2007-526408 20050819

US 20080124294 A1 20080529 US 2007-660379 20070918

PRIORITY APPLN. INFO.: FR 2004-8996 A 20040819
US 2004-612178P P 20040923
WO 2005-EP9991 W 20050819

AB New amphoteric polysaccharide compds. are claimed for use in cosmetics having a sulfonate group (An-X-O)n-P-(O-Z-Sulfo)p-(O(Y)r-CAT)m; wherein P is a polysaccharide chain; X, Y and Z are a C1-12 divalent, linear or substituted, saturated or unsatd., possibly hydroxylated hydrocarbon group and contain at least an ether and/or amine group in the hydrocarbon chain, or a Si(R)2-[O-Si(R)2]q-A-; r is 0 or 1; An is -C(O)OV, CAT represents a quaternary ammonium group or a cationic polymeric chain obtained by grafting and polymerization of ethylene monomers carrying a quaternary ammonium group, Sulfo represents a sulfonic or sulfonate group; and n, m and p are such as the total degree of substitution of polysaccharide does not exceed 2. Sodium CM-cellulose was sulfonated and quaternized. Formulation of a shampoo containing 0.5% of above compound is disclose.

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 9 OF 46 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2006:170531 CAPLUS

DOCUMENT NUMBER: 144:260097

TITLE: Cosmetic use of amphoteric polysaccharides with cationic polymer chain(s)

INVENTOR(S): Philippe, Michel

PATENT ASSIGNEE(S): L'Oreal, Fr.

SOURCE: Fr. Demande, 24 pp.
CODEN: FRXXBL

DOCUMENT TYPE: Patent

LANGUAGE: French

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2874318	A1	20060224	FR 2004-8997	20040819
FR 2874318	B1	20061124		
WO 2006018322	A2	20060223	WO 2005-EP9985	20050818
WO 2006018322	A3	20060504		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

EP 1778362 A2 20070502 EP 2005-791364 20050818
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR

JP 2008516891	T	20080522	JP 2007-526403		20050818
US 20080260674	A1	20081023	US 2007-660381		20071113
PRIORITY APPLN. INFO.:			FR 2004-8997	A	20040819
			US 2004-612170P	P	20040923
			WO 2005-EP9985	W	20050818

AB Polysaccharides with polymeric cationic chains(s), obtained by grafting and polymerization of ethylenic monomers with anionic polysaccharides in presence of a catalytic system comprising potassium permanganate and sulfuric acid are claimed for use in cosmetics. Sodium CM-cellulose was reacted with diallyldimethylammonium chloride to obtain the invention polymer. Formulation of a shampoo containing 0.5% of above compound is disclosed.

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 10 OF 46 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2006:167839 CAPLUS
DOCUMENT NUMBER: 144:239243
TITLE: Cosmetic use of polysaccharide containing nonpolymeric siloxane graft(s)
INVENTOR(S): Philippe, Michel
PATENT ASSIGNEE(S): L'Oreal, Fr.
SOURCE: PCT Int. Appl., 23 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006018323	A1	20060223	WO 2005-EP9986	20050818
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
FR 2874323	A1	20060224	FR 2004-8995	20040819
FR 2874323	B1	20061124		
EP 1778126	A1	20070502	EP 2005-791128	20050818
EP 1778126	B1	20081015		
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR				
CN 101014387	A	20070808	CN 2005-80027800	20050818
JP 2008513357	T	20080501	JP 2007-526404	20050818
AT 411081	T	20081015	AT 2005-791128	20050818
ES 2313417	T3	20090301	ES 2005-791128	20050818
IN 2007KN00190	A	20070629	IN 2007-KN190	20070116
US 20070275927	A1	20071129	US 2007-660380	20070730

PRIORITY APPLN. INFO.:	FR 2004-8995	A	20040819
	US 2004-612176P	P	20040923
	WO 2005-EP9986	W	20050818

AB The invention relates to the cosmetic use of polysaccharides containing

non-polymer siloxane graft(s) that may be obtained by reacting a polysaccharide and a siloxane compound especially for the cosmetic treatment of keratin materials. The invention also relates to compns. comprising the said polysaccharide compds. in a cosmetically acceptable medium, and also to certain novel polysaccharide compds. containing non-polymer siloxane graft(s). Hydroxyethyl cellulose was dispersed in ethanol/water mixture, aminopropyltriethoxysilane was added to the mixture and the precipitate obtained
was isolated by centrifugation and dried. This compound was used at 0.5% in shampoo formulations.

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 11 OF 46 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2005:692116 CAPLUS
DOCUMENT NUMBER: 143:171858
TITLE: Method for the manufacture of **carboxyalkylinulin**
INVENTOR(S): Raaijmakers, Harry W. C.; Neeleman, Ernst
PATENT ASSIGNEE(S): Koninklijke Cooeperatie Cosun U. A., Neth.; Solutia Europe N. V./S. A.
SOURCE: Eur. Pat. Appl., 7 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1559727	A1	20050803	EP 2004-75280	20040130
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
AU 2005209336	A1	20050811	AU 2005-209336	20050128
CA 2555205	A1	20050811	CA 2005-2555205	20050128
WO 2005073256	A1	20050811	WO 2005-BE11	20050128
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1713831	A1	20061025	EP 2005-700220	20050128
EP 1713831	B1	20080409		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK, IS				
CN 1914230	A	20070214	CN 2005-80003727	20050128
JP 2007532698	T	20071115	JP 2006-549794	20050128
AT 391731	T	20080415	AT 2005-700220	20050128
ES 2307140	T3	20081116	ES 2005-700220	20050128
US 20070225483	A1	20070927	US 2006-587878	20060727
IN 2006CN03143	A	20070608	IN 2006-CN3143	20060830
PRIORITY APPLN. INFO.:			EP 2004-75280 A	20040130
			WO 2005-BE11 W	20050128

AB The method comprises steps of: preparing an aqueous medium containing a

haloalkylcarboxylate, adding to the resulting dispersion under substantially neutral pH conditions an **inulin**, heating the mixture to a temperature in the range of 60-90° and proceeding with the reaction at alkaline conditions, pH 8-12, while simultaneously adding addnl. halogenoalkylcarboxylate and alkali hydroxide. The **carboxyalkylinulin** so formed is recovered in a known manner.

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 12 OF 46 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2004:780260 CAPLUS
DOCUMENT NUMBER: 141:273630
TITLE: Gene and protein sequences for fructosyltransferases derived from Lactobacillus reuteri and their use in producing fructans
INVENTOR(S): Van Hijum, Sacha Adrianus Fokke Taco; Van Geel-Schutten, Gerritdina Hendrika; Dijkhuizen, Lubbert; Rahaoui, Hakim
PATENT ASSIGNEE(S): Nederlandse Organisatie Voor Toegepast Natuurwetenschappelijk Onderzoek TNO, Neth.
SOURCE: U.S. Pat. Appl. Publ., 39 pp., Cont.-in-part of U.S. Pat. Appl. 2002 127,681.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20040185537	A1	20040923	US 2004-791799	20040304
US 6635460	B1	20031021	US 2000-604958	20000628
US 20020127681	A1	20020912	US 2001-995587	20011129
US 6730502	B2	20040504		
PRIORITY APPLN. INFO.:			EP 2000-201872	A 20000525
			US 2000-604958	A2 20000628
			US 2001-995587	A2 20011129

AB The present invention describes two novel proteins having fructosyltransferase activity. Both enzymes are derived from lactobacilli, which are food-grade micro-organisms with the Generally Recognized As Safe (GRAS) status. Specificlly, provided are gene and protein sequences for the novel fructosyltransferases from Lactobacillus reuteri. One of the enzymes is an inulosucrase which produces a high mol. weight (>10 Da) fructan containing (2-1) linked fructosyl units and fructo-oligosaccharides, while the other is a levansucrase which produces a fructan containing (2-6) linked fructosyl units. According to the invention lactobacilli capable of producing an **inulin** and/or a levan and/or fructo-oligosaccharides using one or both of the fructosyltransferases can be used as a probiotic or a symbiotic. The invention thus pertains to the enzymes, to DNA encoding them, to recombinant cells containing such DNA and to their use in producing fructans.

L6 ANSWER 13 OF 46 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2003:568617 CAPLUS
DOCUMENT NUMBER: 139:121224
TITLE: Method for producing metallic and ceramic foam and hollow shapes using biogel forming gelling agents on sacrificial support
INVENTOR(S): Cooymans, Jozef; De Wilde, Anne-Marie; Thijs, Ivo; Mullens, Steven; Snijkers, Frans; Luyten, Jan

PATENT ASSIGNEE(S): "Vlaamse Instelling Voor Technologisch Onderzoek", Afgekort "V.I.T.O.", Belg.
SOURCE: Eur. Pat. Appl., 13 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1329438	A1	20030723	EP 2003-447009	20030114
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
EP 1359131	A1	20031105	EP 2002-447076	20020426
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				

PRIORITY APPLN. INFO.: EP 2002-447006 A 20020114
EP 2002-447076 A 20020426

AB The present invention is related to a method for producing ceramic hollow shapes, comprising the following steps: preparation of a stable ceramic powder slurry comprising a gelling agent, with predefined rheol. properties; providing sacrificial support material, Coating said support material with said ceramic slurry; a drying step; and an optional burning step and/or a presintering step depending on the sacrificial support material.

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 14 OF 46 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2002:696558 CAPLUS
DOCUMENT NUMBER: 137:231480
TITLE: Novel fructosyltransferases and their use in recombinant probiotic lactobacilli
INVENTOR(S): Van Hijum, Sacha Adrianus Fokke Taco; Van Geel-Schutten, Gerritdina Hendrika; Dijkhuizen, Lubbert; Rahaoui, Hakim
PATENT ASSIGNEE(S): Nederlandse Organisatie Voor Toegepast-Natuurwetenschappelijk Onderzoek TNO, Neth.
SOURCE: U.S. Pat. Appl. Publ., 38 pp., Cont.-in-part of U. S. Ser. No. 604,958.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20020127681	A1	20020912	US 2001-995587	20011129
US 6730502	B2	20040504		
US 6635460	B1	20031021	US 2000-604958	20000628
US 20040185537	A1	20040923	US 2004-791799	20040304

PRIORITY APPLN. INFO.: EP 2000-201872 A 20000525
US 2000-604958 A2 20000628
US 2001-995587 A2 20011129

AB The present invention describes two novel proteins having fructosyltransferase activity. Both enzymes are derived from lactobacilli, which are food-grade micro-organisms with the Generally Recognized As Safe (GRAS) status. One of these proteins produces an **inulin** and fructo-oligosaccharides, while the other produces a

levan and fructo-oligosaccharides. According to the invention lactobacilli capable of producing an **inulin** and/or a levan and/or fructo-oligosaccharides using one or both of the fructosyltransferases can be used as a probiotic or a symbiotic.
REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 15 OF 46 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2002:615448 CAPLUS
DOCUMENT NUMBER: 137:165817
TITLE: Synthesis, compositions and methods for the measurement of the concentration of stable-isotope labeled compounds in life forms and life form excretory products
INVENTOR(S): Groman, Ernest V.; Reinhardt, Christopher P.
PATENT ASSIGNEE(S): Biophysics Assay Laboratory, Inc., USA
SOURCE: PCT Int. Appl., 116 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002062397	A2	20020815	WO 2002-US5004	20020131
WO 2002062397	A3	20021205		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 20030059368	A1	20030327	US 2002-60652	20020130
US 7048907	B2	20060523		
AU 2002250138	A1	20020819	AU 2002-250138	20020131
EP 1399170	A2	20040324	EP 2002-719031	20020131
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
US 20060067881	A1	20060330	US 2005-248541	20051012
PRIORITY APPLN. INFO.:			US 2001-266647P P	20010205
			US 2002-60652 A3	20020130
			WO 2002-US5004 W	20020131

AB Stable isotope labeling and neutron activation to measure biol. functions are provided, as are the use and method of adding a chemical monitor to correct for neutron flux to sample vials prior to the addition of sample is presented, and the use of stable isotopes as a chemical bar code for vials and other items. Methods are provided also for measuring glomerular filtration rate and glomerular sieving function in a subject, and for measuring other physiol. functions.
REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 16 OF 46 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2002:224782 CAPLUS
DOCUMENT NUMBER: 137:62246
TITLE: New solvent-producing Clostridium sp. strains,

hydrolyzing a wide range of polysaccharides, are closely related to Clostridium butyricum

AUTHOR(S): Montoya, D.; Arevalo, C.; Gonzales, S.; Aristizabal, F.; Schwarz, W. H.

CORPORATE SOURCE: Institute of Biotechnology, Universidad Nacional de Colombia, Santafe de Bogota, AA 14490, Colombia

SOURCE: Journal of Industrial Microbiology & Biotechnology (2001), 27(5), 329-335
CODEN: JIMBFL; ISSN: 1367-5435

PUBLISHER: Nature Publishing Group

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Thirteen new Clostridium strains, previously isolated from soil and found to produce high amts. of solvents from glucose, hydrolyzed a great variety of α- and β-glycans, including raw starch, xylan, pectin, **inulin** and cellulose. The sequences of the PCR-amplified DNA fragments containing the variable 3' part of one of the 16S rRNA genes were 99.5% identical. The macrorestriction pattern of two endonucleolytic digests of chromosomal DNA in the pulsed-field gel electrophoresis (PFGE) confirmed their high homogeneity on the DNA level. The complete 16S rRNA gene sequence of three selected strains was 99.8% identical to the 16S rRNA gene sequence from Clostridium butyricum and separates them from C. acetobutylicum. To the closely related four species of solventogenic clostridia a new group of strains has to be added, which has a great potential for the direct fermentation of biomass.

REFERENCE COUNT: 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 17 OF 46 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2002:123604 CAPLUS

DOCUMENT NUMBER: 136:169281

TITLE: Physical forms of clarified hydrocolloids of undiminished properties and method of producing same

INVENTOR(S): Renn, Donald Walter; Blake, Nancy Amelia

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 31 pp., Cont.-in-part of U.S. Ser. No. 609,870.
CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20020019447	A1	20020214	US 2001-804402	20010313
US 6586590	B1	20030701	US 2000-609870	20000703
WO 2002072687	A2	20020919	WO 2002-CA334	20020311
WO 2002072687	A3	20031023		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2002245960	A1	20020924	AU 2002-245960	20020311

PRIORITY APPLN. INFO.: US 2000-609870 A2 20000703
US 2001-804402 A 20010313
WO 2002-CA334 W 20020311

AB This invention relates to novel forms of clarified hydrocolloids including gels, films, foams, capsules and sponges. The invention also pertains to novel processes for producing the various phys. forms of the clarified hydrocolloids such as konjac glucomannan, locust bean gum, guar gum, aloe acemannan and xanthan gum. The invention also includes clarified hydrocolloid composites; borated cis- 1,2-diol containing hydrocolloids; and clarified hydrocolloids of low viscosity.

L6 ANSWER 18 OF 46 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2001:868644 CAPLUS
DOCUMENT NUMBER: 136:17259
TITLE: Purification, characterization and use of inulosucrase and levansucrase from Lactobacillus reuteri
INVENTOR(S): Van Geel-Schutten, Gerritdina Hendrika; Rahaoui, Hakim; Dijkhuizen, Lubbert; Van Hijum, Sacha Adrianus Fokke Taco
PATENT ASSIGNEE(S): Nederlandse Organisatie Voor Toegepast-Wetenschappelijk Onderzoek, Neth.
SOURCE: PCT Int. Appl., 54 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001090319	A2	20011129	WO 2001-NL392	20010523
WO 2001090319	A3	20020815		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2409965	A1	20011129	CA 2001-2409965	20010523
EP 1283888	A2	20030219	EP 2001-934630	20010523
EP 1283888	B1	20080604		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
AU 2001260791	B2	20061109	AU 2001-260791	20010523
AT 397667	T	20080615	AT 2001-934630	20010523
ES 2307616	T3	20081201	ES 2001-934630	20010523

PRIORITY APPLN. INFO.: EP 2000-201872 A 20000525
EP 2001-200049 A 20010109
WO 2001-NL392 W 20010523

AB The present invention describes two novel proteins having fructosyltransferase activity. One of the enzymes is an inulosucrase which produces an **inulin** and fructo-oligosaccharides, while the other is a levansucrase which produces a levan. Both enzymes are derived from Lactobacillus reuteri, which are food-grade microorganisms with the Generally Recognized As Safe (GRAS) status. Isolation of DNA from L. reuteri, nucleotide sequence anal. of the inulosucrase (ftfA) gene, construction of plasmids for expression of the inulosucrase gene in E.

coli Top10, expression of the inulosucrase gene in E. coli Top10 and identification of the polysaccharides produced by the recombinant enzyme are described. Purification and amino acid sequencing of the L. reuteri levansucrase (gene ftfB) and nucleotide sequence of the gene ftfB are reported. According to the invention lactobacilli capable of producing an **inulin** and/or a levan and/or fructo-oligosaccharides using one or both of the fructosyltransferases can be used as a probiotic or a symbiotic.

L6 ANSWER 19 OF 46 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2001:12577 CAPLUS
DOCUMENT NUMBER: 134:87953
TITLE: Bleach activator based on **inulin**
INVENTOR(S): Bolkenbaas, Mariette Ellen Boukje; Raaijmakers, Henricus Wilhelmus Carolina; Kuzee, Hendrika Cornelia; Van Doren, Hendrik Arend; Haaksman, Ingrid Karin
PATENT ASSIGNEE(S): Cooperatie Cosun U.A., Neth.
SOURCE: PCT Int. Appl., 14 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001000771	A1	20010104	WO 2000-NL462	20000630
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
NL 1012482	C2	20010103	NL 1999-1012482	19990630
CA 2377312	A1	20010104	CA 2000-2377312	20000630
EP 1190034	A1	20020327	EP 2000-944471	20000630
EP 1190034	B1	20041103		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2003503583	T	20030128	JP 2001-506766	20000630
AT 281509	T	20041115	AT 2000-944471	20000630
ES 2231215	T3	20050516	ES 2000-944471	20000630
PRIORITY APPLN. INFO.:			NL 1999-1012482 A	19990630
			WO 2000-NL462 W	20000630

AB A partially acylated fructan, in particular a partially acylated **inulin**, having a degree of substitution with acyl groups of 0.4-2.5 and a degree of substitution of at most 0.2 with other substituents is used as a bleach activator. The solubility and efficiency of these derivs. is better than that of comparable products such as completely acylated derivs. and carboxylated derivs. The derivs. are prepared by acylation in an aqueous medium under controlled pH.
REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 20 OF 46 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2000:322866 CAPLUS
DOCUMENT NUMBER: 133:134225
TITLE: Isolation of mesophilic solvent-producing clostridia

from Colombian sources: physiological characterization, solvent production and polysaccharide hydrolysis

AUTHOR(S): Montoya, D.; Spitia, S.; Silva, E.; Schwarz, W. H.

CORPORATE SOURCE: Institute of Biotechnology, National University of Colombia, Santafe de Bogota, AA 14490, Colombia

SOURCE: Journal of Biotechnology (2000), 79(2), 117-126
CODEN: JBITD4; ISSN: 0168-1656

PUBLISHER: Elsevier Science Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB One hundred and seventy-eight new butanol-acetone producing bacteria related to saccharolytic clostridia were isolated from agricultural sources in Colombia and their fermentation potential was evaluated. Thirteen isolates produced more total solvents from glucose than Clostridium acetobutylicum ATCC 824. The isolates with the highest single solvent production were IBUN 125C and IBUN 18A with 0.46 mol butanol and 0.96 mol ethanol formed from 1 mol glucose, yielding 25.2 and 29.1 g L-1 total solvents, resp., which is close to the maximum values described to date. Most of the new isolates produced exoenzymes for the hydrolysis of starch, CM-cellulose, xylan, polygalacturonic acid, **inulin** and chitosan. Together with the high efficiency of solvent production, these hydrolytic isolates may be useful for the direct fermentation of biomass. According to their physiol. profile, the most solvent-productive isolates could be classified as strains of C. acetobutylicum, Clostridium beijerinckii, and Clostridium NCP262.

REFERENCE COUNT: 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 21 OF 46 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1999:549231 CAPLUS

DOCUMENT NUMBER: 131:186471

TITLE: Process for controlling scale in the sugar process

INVENTOR(S): Berends, Robert; Kuzee, Hendrika Cornelia

PATENT ASSIGNEE(S): Cooperatie Cosun U.A., Neth.

SOURCE: PCT Int. Appl., 12 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9942410	A1	19990826	WO 1999-NL93	19990222
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
NL 1008371	C2	19990824	NL 1998-1008371	19980220
CA 2320848	A1	19990826	CA 1999-2320848	19990222
AU 9927483	A	19990906	AU 1999-27483	19990222
AU 749259	B2	20020620		
BR 9908086	A	20001031	BR 1999-8086	19990222
EP 1060135	A1	20001220	EP 1999-907954	19990222
EP 1060135	B1	20011212		

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, FI

TR	200002426	T2	20001221	TR	2000-2426	19990222
HU	2001000653	A2	20010730	HU	2001-653	19990222
AT	210611	T	20011215	AT	1999-907954	19990222
JP	2002503498	T	20020205	JP	2000-532368	19990222
PT	1060135	T	20020531	PT	1999-907954	19990222
ES	2168853	T3	20020616	ES	1999-907954	19990222
MX	2000008093	A	20020311	MX	2000-8093	20000818
US	6506258	B1	20030114	US	2000-622477	20001205

PRIORITY APPLN. INFO.: NL 1998-1008371 A 19980220
WO 1999-NL93 W 19990222

AB The deposition of Ca salts, including CaCO3 and Ca oxalate and the formation of foam, during the evaporation of sugar streams can be prevented or restricted by adding 0.1-200 ppm of a **carboxyalkyl** fructan that contains 0.5-3 carboxyl groups per monosaccharide unit, 0.4-2.5 of which carboxyl groups are in the form of **carboxyalkyl** groups, especially **carboxymethyl** groups, to the sugar streams. The other carboxyl groups can be carboxyl groups obtained by oxidation The **carboxymethyl** fructan, e.g., **carboxymethyl** **inulin** gives comparable results to polyacrylates, which are less desirable from the standpoint of health and the environment.

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 22 OF 46 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1999:34991 CAPLUS
DOCUMENT NUMBER: 130:92127
TITLE: Proteinases coupled with low-molecular-weight polymeric materials have reduced allergenicity and are useful in a variety of industrial uses.
INVENTOR(S): Olsen, Arne Agerlin; Fatum, Tine Muxoll; Deussen, Heinz-Josef; Roggen, Erwin Ludo
PATENT ASSIGNEE(S): Novo Nordisk A/S, Den.
SOURCE: PCT Int. Appl., 60 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9900489	A1	19990107	WO 1998-DK270	19980622
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
CA 2294567	A1	19990107	CA 1998-2294567	19980622
AU 9880122	A	19990119	AU 1998-80122	19980622
AU 751880	B2	20020829		
EP 1002064	A1	20000524	EP 1998-928182	19980622
EP 1002064	B1	20071010		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, NL, SE, PT, IE, FI				
JP 2002516615	T	20020604	JP 1999-505220	19980622
CN 100335624	C	20070905	CN 1998-807497	19980622
AT 375387	T	20071015	AT 1998-928182	19980622

ES 2296336	T3	20080416	ES 1998-928182		19980622
US 6303752	B1	20011016	US 1998-104623		19980625
PRIORITY APPLN. INFO.:			DK 1997-753	A	19970625
			US 1997-51830P	P	19970707
			WO 1998-DK270	W	19980622

AB The present invention relates to modified polypeptides with reduced respiratory allergenicity having coupled polymeric mols. with a mol. weight from 100 up to 750 Da, covalently conjugated to the parent polypeptide having a mol. weight from 5 to 100 kDa. Contrary to expectations, short/light polymeric mols. are capable of shielding the surface of the polypeptide sufficiently to reduce allergenicity. Thus, when mPEG 350 is activated with N-succinimidyl carbonate and conjugated with Bacillus proteinase PD498 or subtilisin Y, the resulting products demonstrate reduced IgE response (i.e., allergenicity) than the native enzymes in brown Norway rat intratrachaeal trials. Industrial compns. comprising modified polypeptide with reduced respiratory allergenicity have uses such as skin care products.

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 23 OF 46 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1998:742255 CAPLUS
DOCUMENT NUMBER: 130:17234
TITLE: Preparation of microsphere drug delivery systems
INVENTOR(S): Wu, Xiao Yu; Liu, Zhi
PATENT ASSIGNEE(S): Can.
SOURCE: PCT Int. Appl., 47 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9850018	A1	19981112	WO 1998-CA419	19980506
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
CA 2288876	A1	19981112	CA 1998-2288876	19980506
AU 9872019	A	19981127	AU 1998-72019	19980506
PRIORITY APPLN. INFO.:			US 1997-45710P	P 19970506
			WO 1998-CA419	W 19980506

AB A drug delivery composition comprising microspheres containing at least one chemotherapeutic agent and at least 1 chemosensitizer wherein the microspheres have a biodegradable polymer matrix with functional groups which associate with the chemotherapeutic agent and chemosensitizer is described. **Carboxymethyl** dextran microspheres were prepared and mixed with 1% verapamil or doxorubicin aqueous solution The microspheres showed sustained drug release.

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 24 OF 46 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1998:550497 CAPLUS
DOCUMENT NUMBER: 129:172134
ORIGINAL REFERENCE NO.: 129:34902a
TITLE: Protein-polymer conjugates with reduced immunogenicity and allergenicity
INVENTOR(S): Von Der Osten, Claus; Olsen, Arne Agerlin; Roggen, Erwin Ludo
PATENT ASSIGNEE(S): Novo Nordisk A/S, Den.
SOURCE: PCT Int. Appl., 124 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9835026	A1	19980813	WO 1998-DK46	19980206
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
CA 2279986	A1	19980813	CA 1998-2279986	19980206
AU 9857495	A	19980826	AU 1998-57495	19980206
AU 740207	B2	20011101		
EP 1017794	A1	20000712	EP 1998-901327	19980206
R: BE, CH, DE, ES, FR, GB, IT, LI, NL				
JP 2001511162	T	20010807	JP 1998-533584	19980206
US 6245901	B1	20010612	US 1998-24532	19980217
US 6623950	B1	20030923	US 2000-705185	20001102
US 20050079593	A1	20050414	US 2003-623292	20030718

PRIORITY APPLN. INFO.:		
DK 1997-135	A	19970206
WO 1998-DK46	W	19980206
US 1998-24532	A3	19980217
US 2000-705185	A3	20001102

AB The present invention relates to protein-polymer conjugates in which one or more attachment groups for coupling polymeric mols. on the surface of the protein structure have been added and/or removed, a method for preparing protein-polymer conjugates of the invention, the use of said conjugated for reducing the immunogenicity and allergenicity, and compns. comprising said conjugate for use in pharmaceuticals, skin care products, food and feed. Thus, the proteins are modified by conservative substitution of Lys for Arg, Asp or Glu for Asn or Gln, or vice-versa to provide more attachment sites away from the functional site(s) and to remove attachment sites in the vicinity of the functional site(s). Then, using known methods, polymeric materials such as PEG are attached to the modified protein. Humicola lanuginosa lipase was mutagenized to prepare 87K, 254K-lipase. This mutant was conjugated to PEG 15,000 to prepare a lipase with reduced antigenicity.
REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 25 OF 46 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1998:493671 CAPLUS
DOCUMENT NUMBER: 129:126923
ORIGINAL REFERENCE NO.: 129:25891a,25894a

TITLE: Enzyme coupled with polymeric molecules for skin care
INVENTOR(S): Olsen, Arne Agerlin; Prento, Annette
PATENT ASSIGNEE(S): Novo Nordisk A/S, Den.
SOURCE: PCT Int. Appl., 57 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9830682	A1	19980716	WO 1998-DK15	19980112
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
CA 2277618	A1	19980716	CA 1998-2277618	19980112
AU 9854785	A	19980803	AU 1998-54785	19980112
AU 736806	B2	20010802		
EP 954572	A1	19991110	EP 1998-900274	19980112
R: BE, DE, ES, FR, GB, IT, NL				
JP 2002510963	T	20020409	JP 1998-530483	19980112
US 6416756	B1	20020709	US 1998-19532	19980205

PRIORITY APPLN. INFO.:			
DK 1997-38	A	19970110	
DK 1997-754	A	19970625	
US 1997-51831P	P	19970707	
WO 1998-DK15	W	19980112	

AB The present invention relates to modified enzymes suitable for skin care having from 4 to 70 polymeric mols., with a mol. weight from 1 to 35 kDa, coupled covalently to the surface of parent enzymes having a mol. weight from 15 to 100 kDa. Further the invention is directed towards skin care compns. and products comprising such modified enzymes and finally the use of said modified enzyme for reducing the sensitization potential of skin care products.
REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 26 OF 46 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1998:405992 CAPLUS
DOCUMENT NUMBER: 129:82947
ORIGINAL REFERENCE NO.: 129:17103a,17106a
TITLE: Manufacture of fructan-polycarboxylic acid
INVENTOR(S): Kuzee, Hendrika Cornelia; Bolkenbaas, Mariette Ellen Boukje; Raaijmakers, Henricus Wilhelmus Carolina
PATENT ASSIGNEE(S): Cooperatie Cosun U.A., Neth.; Kuzee, Hendrika Cornelia; Bolkenbaas, Mariette Ellen Boukje; :Raaijmakers, Henricus
SOURCE: PCT Int. Appl., 17 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

WO 9825972	A1	19980618	WO 1997-NL677		19971209
W: AU, CA, JP, NZ, US					
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE					
NL 1004738	C2	19980611	NL 1996-1004738		19961210
AU 9853457	A	19980703	AU 1998-53457		19971209
PRIORITY APPLN. INFO.:			NL 1996-1004738	A	19961210
			WO 1997-NL677	W	19971209

AB The title acids and their salts, in which ≥0.05 of every 3 hydroxymethyl(ene) groups has been converted into a carboxyl group and ≥0.1 of every 3 OH groups has been converted into a carboxymethoxy (or other **carboxyalkyl** or carboxyacyl) group, have an improved action as crystal growth-inhibiting, Ca-binding and/or -dispersing agents. A process for their manufacture by oxidation of fructan followed by **carboxymethylation** of oxidized product, or by performing the reactions in reverse order, and their use in detergents, cleaning agents, H2O treatment agents, textile treatment agents, papermaking and removal of heavy metals is also claimed. Thus, oxidized, **carboxymethylated inulin** having Ca binding capacity 0.6-1.5 mmol Ca/g was manufactured by oxidation of **inulin** with NaOCl followed by **carboxymethylation** with ClCH2CO2Na.

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 27 OF 46 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1998:219837 CAPLUS
DOCUMENT NUMBER: 128:258727
ORIGINAL REFERENCE NO.: 128:51201a,51204a
TITLE: Cationic fructan derivatives and manufacture and uses thereof
INVENTOR(S): Kuzee, Hendrika Cornelia; Bolkenbaas, Mariette Ellen Boukje; Jonker, Ronald
PATENT ASSIGNEE(S): Cooperatie Cosun U.A., Neth.; Kuzee, Hendrika Cornelia; Bolkenbaas, Mariette Ellen Boukje; Jonker, Ronald
SOURCE: PCT Int. Appl., 19 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9814482	A1	19980409	WO 1997-NL543	19970930
W: AU, CA, JP, NZ, US				
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
NL 1004153	C2	19980331	NL 1996-1004153	19960930
CA 2269540	A1	19980409	CA 1997-2269540	19970930
CA 2269540	C	20060919		
AU 9744025	A	19980424	AU 1997-44025	19970930
AU 719739	B2	20000518		
EP 918800	A1	19990602	EP 1997-942300	19970930
EP 918800	B1	20020102		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 2001505594	T	20010424	JP 1998-516396	19970930
JP 4181221	B2	20081112		
NZ 334805	A	20010427	NZ 1997-334805	19970930
AT 211490	T	20020115	AT 1997-942300	19970930

PT 918800	T	20020531	PT 1997-942300		19970930
ES 2169424	T3	20020701	ES 1997-942300		19970930
US 20020082399	A1	20020627	US 1999-269028		19990318
PRIORITY APPLN. INFO.:			NL 1996-1004153	A	19960930
			WO 1997-NL543	W	19970930

OTHER SOURCE(S): MARPAT 128:258727

AB The title compds., such as **inulin**, contain a nitrogen atom having substituents R1, R2 and R3 bonded to one or more anhydrofructose units via a straight-chain or branched C2-6 alkylene group, which is optionally preceded by a carbonyl group or interrupted by one or two oxygen atoms or imino or alkylimino groups and optionally substituted by one or two hydroxyl groups or amine groups or a carboxyl or carbamoyl group; R1, R2 = H, Me, **carboxymethyl**, phosphonomethyl, Et, hydroxyethyl, Pr, iso-Pr, allyl, hydroxypropyl, dihydroxypropyl or, together with the nitrogen atom, form a cyclic group; R3 = H, C1-18 alkyl, C3-18 alkenyl, alkynyl, cycloalkyl, C4-18 cycloalkylalkyl, C7-18 aralkyl or is bonded via an alkylene group to an oxygen atom of a subsequent anhydrofructose unit. Chicory **inulin** was treated with 3-chloro-2-hydroxypropyltrimethylammonium chloride to obtain a light-brown cationic **inulin** of N content 5.44% (degree of substitution 1.53). A conditioning shampoo comprised demineralized water 53.3, Lexaine C 8, Loramide LM 1.2, Standapol ES-2 32, Miranol C2M SF 2.5, the above cationic **inulin** 2, Germall 115 0.25, fragrance 0.25, NaCl 0.5, and citric acid to 100%.

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 28 OF 46 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1997:550155 CAPLUS

DOCUMENT NUMBER: 127:220890

ORIGINAL REFERENCE NO.: 127:43057a,43060a

TITLE: Distribution of substituents in O-**carboxymethyl** and O-cyanoethyl ethers of **inulin**

AUTHOR(S): Verraest, Dorine L.; Peters, Joop A.; Kuzee, Hennie C.; Raaijmakers, Harry W. C.; van Bekkum, Herman

CORPORATE SOURCE: Lab. Organic Chem. Catalysis, Delft Univ. Technology, Delft, 2628, Neth.

SOURCE: Carbohydrate Research (1997), 302(3-4), 203-212 CODEN: CRBRAT; ISSN: 0008-6215

PUBLISHER: Elsevier

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The distribution of substituents in O-**carboxymethyl** and O-cyanoethyl ethers of **inulin** was studied using 13C NMR spectroscopy and HPLC anal. For both types of **inulin** derivs., the distribution of substituents can be described by the statistical model of Spurlin, showing that the substituents are uniformly distributed along the **inulin** chains and that the reactivities of the hydroxdyl groups in the sugar units are independent upon substitution of a neighboring hydroxyl group. The 4-position of the D-fructofuranoxyl units was found to be the most reactive in the etherifications.

REFERENCE COUNT: 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 29 OF 46 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1997:542472 CAPLUS

DOCUMENT NUMBER: 127:189893

ORIGINAL REFERENCE NO.: 127:36833a,36836a

TITLE: Modified **inulin**

INVENTOR(S): Kuzee, Hendrika Cornelia
PATENT ASSIGNEE(S): Cooperatie Cosun U.A., Neth.; Kuzee, Hendrika Cornelia
SOURCE: PCT Int. Appl., 23 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9729133	A1	19970814	WO 1997-NL47	19970210
W: AU, CA, JP, NZ, US				
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
AU 9716753	A	19970828	AU 1997-16753	19970210
EP 879249	A1	19981125	EP 1997-902736	19970210
EP 879249	B1	20010905		
R: BE, DE, FR, GB, IT, LU, NL				
PRIORITY APPLN. INFO.:			EP 1996-200299	A 19960209
			WO 1997-NL47	W 19970210

AB A process is described for producing modified **inulin** having an average chain length of at least 8 monosaccharide units, which is modified by treatment with a reducing agent, such as hydrogen with a transition metal catalyst, sodium borohydride or electrochem. The reduced **inulin** can be further modified e.g. by oxidation, **carboxyalkylation**, hydroxyalkylation or cyanoethylation, or a combined derivatization. It is suitable as a food ingredient or as a pharmaceutical aid.

L6 ANSWER 30 OF 46 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1995:954560 CAPLUS
DOCUMENT NUMBER: 124:11296
ORIGINAL REFERENCE NO.: 124:2291a,2294a
TITLE: **Carboxymethyl inulin**
INVENTOR(S): Verraest, Dorine Lisa; Batelaan, Jan Gerardus; Peters, Johannes Andreas; Van Bekkum, Herman
PATENT ASSIGNEE(S): Akzo Nobel N. V., Neth.
SOURCE: PCT Int. Appl., 15 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9515984	A1	19950615	WO 1994-EP4097	19941209
W: CA, JP, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
NL 9302163	A	19950703	NL 1993-2163	19931210
CA 2178591	A1	19950615	CA 1994-2178591	19941209
CA 2178591	C	20060321		
EP 733073	A1	19960925	EP 1995-903332	19941209
EP 733073	B1	19970917		
R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, NL, PT, SE				
JP 09506387	T	19970624	JP 1994-515979	19941209
AT 158307	T	19971015	AT 1995-903332	19941209
ES 2107297	T3	19971116	ES 1995-903332	19941209
US 5777090	A	19980707	US 1996-663037	19960606
PRIORITY APPLN. INFO.:			NL 1993-2163	A 19931210
			WO 1994-EP4097	W 19941209

AB **Carboxymethyl inulin** having a degree of substitution from 0.15 to 2.5, preferably from 0.5 to 1.5, is prepared by reacting **inulin** at a concentration of ≥100 g/L, preferably ≥200 g/L, at elevated temperature with an aqueous alkaline solution of monochloroacetic acid, followed by working up as usual. The **carboxymethyl inulin** is useful as inhibitor for the crystallization of calcium carbonate in detergent formulation.

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 31 OF 46 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1995:748188 CAPLUS
DOCUMENT NUMBER: 124:30167
ORIGINAL REFERENCE NO.: 124:5799a,5802a
TITLE: **Carboxymethylation** of **inulin**
AUTHOR(S): Verraest, Dorine L.; Peters, Joop A.; Batelaan, Jan G.; van Bekkum, Herman
CORPORATE SOURCE: Lab. Org. Chem. Catalysis, Delft Univ. Technology, Delft, 2628 BL, Neth.
SOURCE: Carbohydrate Research (1995), 271(1), 101-12
CODEN: CRBRAT; ISSN: 0008-6215
PUBLISHER: Elsevier
DOCUMENT TYPE: Journal
LANGUAGE: English

AB **Inulin** was **carboxymethylated** in aqueous alkaline medium with monochloroacetic acid as the reagent. The degree of substitution of the reaction product was determined by titration, LC anal. and 13C NMR spectroscopy. **Carboxymethylinulin** with a degree of substitution between 0.2 and 1 was obtained depending on the molar ratio of **inulin** -monochloroacetic acid. Increasing the concentration of the reaction mixture and lowering the reaction temperature resulted in higher selectivities towards **carboxymethylinulin.** Determination of the mol. weight distribution was performed by GPC and by multi-angle laser light scattering. **Carboxymethylation** caused little or no degradation of the chain length of the starting material.

L6 ANSWER 32 OF 46 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1995:740920 CAPLUS
DOCUMENT NUMBER: 123:147194
ORIGINAL REFERENCE NO.: 123:26173a,26176a
TITLE: **Carboxyalkylation** of polysaccharides
INVENTOR(S): Fuertes, Patrick; Labergerie, Erik
PATENT ASSIGNEE(S): Roquette Freres, Fr.
SOURCE: Fr. Demande, 39 pp.
CODEN: FRXXBL
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2707649	A1	19950120	FR 1993-8770	19930716
FR 2707649	B1	19950915		
WO 9502614	A1	19950126	WO 1994-FR882	19940713

W: CA, FI, JP, NO, US
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE

PRIORITY APPLN. INFO.: FR 1993-8770 A 19930716

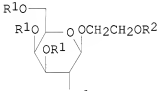
AB In the title process, polysaccharides with dextrose equivalent <5, optionally hydrogenated, are subjected to **carboxyalkylation** or cyanoethylation. Treating a 70% aqueous solution of 100 g hydrogenated starch hydrolyzate (Glucidex 2) with 0.31 mol ClCH2CO2Na (I) over 1.5-2 h at 60° resulted in 90.7% fixation of I. Use of the products as detergent additives and binders is exemplified.

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 33 OF 46 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1995:468514 CAPLUS
DOCUMENT NUMBER: 122:240341
ORIGINAL REFERENCE NO.: 122:43941a,43944a
TITLE: Preparation of phospholipids and liposome
INVENTOR(S): Sasaki, Atsushi; Murahashi, Naoichi
PATENT ASSIGNEE(S): Dds Kenkyusho Kk, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 15 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 06271597	A	19940927	JP 1993-58604	19930318
PRIORITY APPLN. INFO.:			JP 1993-58604	19930318
OTHER SOURCE(S):	MARPAT 122:240341			

GI



II

AB Phospholipids X-T1-(CH2CH2O)n-P(O)(OH)OR [I; X = monosaccharide such as glucose, deoxyglucose, mannose, galactose, fucose, ribose, deoxyribose, rhamnose, xylose, arabinose, erythrose, sialic acid, uronic acid, or hexosamine, O- or N-acyl derivs., O-**carboxyalkyl** or alkyl derivs., or phosphoric acid or sulfuric acid esters of these monosaccharides, oligosaccharide comprising these monosaccharides and/or the monosaccharide derivs.; T1 = O, NHCO, CONH, O2C, CO2, NHCO2, O2CNH, NHCONH; R = cholesterol or C12-20 linear alkanol residue, CH2CH(T2-R')CH2-T2-R', CH(CH2-T2-R')2, CH(T2-R')CH2-T2-R'; wherein T2 = CH2, group listed in T1; R' = C12-20 linear alkyl; n = 1-8] are prepared A liposome contains phospholipids I. This liposome exhibits orientation to and accumulation in specific organs and is useful as a pharmaceutical carrier. Thus, 2-hydroxyethyl 2,3,4,6-tetra-O-acetyl-β-D-galactopyranoside (II; R1 = Ac; R2 = H) was condensed with 2-cyanoethyl N,N-diisopropylchlorophosphoramidite in the presence of (Me2CH)2NEt in CH2Cl2 and the resulting phosphoramidite was condensed with 2-(n-hexadecyl)-1-octadecanol in the presence of 1H-tetrazole in MeCN followed by oxidation with H2O2 and deprotection with NaOMe in MeOH/benzene

to give II [R1 = H, R2 = P(O)(OH)OCH2CH(n-C16H33)2] (III). A liposome comprising L-α-dipalmitoylphosphatidylcholine, cholesterol, III, and [3H]**inulin** was injected to rats and after 15 min to 6 h, the serum concentration of the liposome rapidly decreased, while the concentration in liver markedly increased.

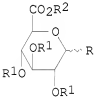
L6 ANSWER 34 OF 46 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER:	1994:457883 CAPLUS
DOCUMENT NUMBER:	121:57883
ORIGINAL REFERENCE NO.:	121:10453a,10456a
TITLE:	Preparation of poly(ethylene glycol)-based lipid and glycolipids having acidic functional groups as micro-particle pharmaceutical carriers
INVENTOR(S):	Morikawa, Yasuri; Azuma, Kunio; Aono, Katsutoshi; Sasaki, Atsushi; Murahashi, Naoichi; Sakagami, Masahiro
PATENT ASSIGNEE(S):	Dds Kenkyusho Kk, Japan
SOURCE:	Jpn. Kokai Tokkyo Koho, 58 pp. CODEN: JKXXAF
DOCUMENT TYPE:	Patent
LANGUAGE:	Japanese
FAMILY ACC. NUM. COUNT:	1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 06080686	A	19940322	JP 1992-259090	19920902
PRIORITY APPLN. INFO.:			JP 1992-259090	19920902

GI



I

AB Acidic functional groups-bearing lipid derivs. containing a compound having one or a plural number of acidic functional groups added to one end of polyethylene glycol chain (d.p. ≥3) and a compound having one or a plural number of C≥5 alkyl and/or alkenyl groups added to the other end of the poly(ethylene glycol) chain, which are useful as micro-particle carriers for drug delivery and not readily trapped by endothelial tissues, are prepared The compds. having acidic functional groups are (1) sugars having acidic functional groups which are preferably one or a plural number of sugars selected from galactose, fucose, mannose, glucose, and derivs. thereof, (2) sialic acid, uronic acid, or compds. having one or a plural number of sialic acid and uronic acid, or (3) compds. having phosphoric acid or its residue, compds. having sulfuric acid or its residue, phosphenic acids, phosphonic acids, sulfonic acids, sulfinic acids, sulfenic acids, or carboxylic acids. The acidic functional group is phosphoric or sulfuric acid residue, phosphenyl, phosphonyl, sulfonyl, sulfinyl, sulfenyl, or carboxyl group. The micro-particle carrier is liposome. Thus, glucuronic acid derivative (I; R = β-OAc, R1 = Ac, R2 = Me) was stirred with H(OCH2CH2)3Cl in the presence of BF3.Et2O in CH2Cl2 to give

glycoside α-anomer I [R = α-(OCH2CH2)3C1, R1 = Ac, R2 = Me] and β-anomer. The α-glycoside was heated NaN3 in DMF at 60° for 20 h to give I [R = α-(OCH2CH2)3N3, R1 = Ac, R2 = Me] which was hydrogenated over Lindlar catalyst in EtOH containing p-MeC6H4SO3H.H2O to give amine salt I.p-MeC6H4SO3H [R = α-(OCH2CH2)3NH2, R1 = Ac, R2 = Me] (II). (C16H33)2CHCO2H was treated with N-hydroxysuccinimide and DCC in CH2C12 and condensed with the amine II in the presence of Et3N to give amide I [R = α-(OCH2CH2)3NHCOCH(C16H33)2, R1 = Ac, R2 = Me] which was deacetylated with NaOMe in MeOH and saponified with aqueous NaOH in MeOH to give I [R = R = α-(OCH2CH2)3NHCOCH(C16H33)2, R1 = R2 = H] (III). A suspension of liposomes prepared from III, L-α-dipalmitoylphosphatidylcholine, and cholesterol and containing 3H-**inulin** was administered to rats and accumulated in spleen at .apprx.1/7 the tissue concentration .apprx.7 times less than that of control liposomes without III.

L6 ANSWER 35 OF 46 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1994:289400 CAPLUS
DOCUMENT NUMBER: 120:289400
ORIGINAL REFERENCE NO.: 120:50715a,50718a
TITLE: Manipulation of renal disposition of human recombinant superoxide dismutase by chemical modification
AUTHOR(S): Mihara, Kiyoshi; Sawai, Kenzo; Takakura, Yoshinobu; Hashida, Mitsuru
CORPORATE SOURCE: Fac. Pharm. Sci., Kyoto Univ., Kyoto, 606-01, Japan
SOURCE: Biological & Pharmaceutical Bulletin (1994), 17(2), 296-301
CODEN: BPBLEO; ISSN: 0918-6158
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The renal disposition characteristics of superoxide dismutase (SOD) and its derivs., including macromol. conjugates with polyethylene glycol and **carboxymethyl**-dextran, cationized derivative, and glycosylated derivs. with galactose and mannose, were studied in the isolated perfused rat kidney. Renal disposition processes, such as glomerular filtration, tubular reabsorption, and uptake from the capillary side, were quant. determined by single-pass indicator dilution expts. under filtering and nonfiltering kidney conditions. Native SOD had a high glomerular filtration rate (40% of that of **inulin**) and was effectively reabsorbed in the tubules, while no significant uptake was observed from capillary side. Macromol. conjugates showed restricted glomerular filtration due to an increase in mol. size. Cationization of SOD greatly enhanced its association with the tissue, not only from the luminal side but also from the capillary side, based upon electrostatic interaction. Galactosylated and mannosylated SOD showed reduced tubular reabsorption and increased exposure of the luminal surface to the enzyme. In addition, a small but significant uptake of mannosylated SOD from the capillary side was observed This uptake was dose-dependent and completely inhibited by mannan, suggesting that mannose receptor-mediated endocytosis existed in the capillary side of the kidney. Thus, the authors can manipulate the renal disposition profiles of SOD by changing its physicochem. or biol. properties through chemical modification.

L6 ANSWER 36 OF 46 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1994:253358 CAPLUS
DOCUMENT NUMBER: 120:253358
ORIGINAL REFERENCE NO.: 120:44703a,44706a
TITLE: Cyclodextrin complexes with polymers, drugs,

agrochemicals and cosmetics
INVENTOR(S): Loftsson, Thorsteinn
PATENT ASSIGNEE(S): Iceland
SOURCE: Eur. Pat. Appl., 46 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 579435	A1	19940119	EP 1993-305280	19930706
EP 579435	B1	19990317		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
US 5324718	A	19940628	US 1992-912853	19920714
AT 177647	T	19990415	AT 1993-305280	19930706
ES 2132190	T3	19990816	ES 1993-305280	19930706
US 5472954	A	19951205	US 1994-240510	19940511
PRIORITY APPLN. INFO.:			US 1992-912853 A	19920714
			EP 1993-305280 A	19930706

AB A method for enhancing the complexation of a cyclodextrin (I) with a lipophilic and/or water-labile drug, comprising combining .apprx.0.1-70% (weight/volume) of I and .apprx.0.001-5% (weight/volume) of a water-soluble polymer in an aqueous medium. The polymer and I are dissolved in the aqueous medium before the drug is added. To a solution containing Na CM-cellulose 0.25 and 2-hydroxypropyl-β-cyclodextrin 10% was added acetazolamide (II) and the solution was heated at 120° for 20 min and allowed to equilibrate at room temperature for 3 days and amount of II was determined The solubility of II was 3.11mg/mL as compared to 0.7 for control containing only II. Different formulations containing cyclodextrin complexes with polymers and drugs are disclosed.

L6 ANSWER 37 OF 46 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1993:610722 CAPLUS
DOCUMENT NUMBER: 119:210722
ORIGINAL REFERENCE NO.: 119:37399a,37402a
TITLE: Peptides for pharmaceuticals
INVENTOR(S): Myoshi, Teruzo; Mimura, Shuji; Mitsuno, Tooru
PATENT ASSIGNEE(S): Denki Kagaku Kogyo Kk, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 05097694	A	19930420	JP 1992-85092	19920309
JP 3283288	B2	20020520		
PRIORITY APPLN. INFO.:			JP 1991-67674 A1	19910308

AB Therapeutic peptides with hyaluronates and polymers are stable and released from the formulation in a controlled manner. For example, an oral formulation was prepared containing Na hyaluronate and human interferon for treatment of cancer and viral infections.

L6 ANSWER 38 OF 46 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1993:260763 CAPLUS
DOCUMENT NUMBER: 118:260763
ORIGINAL REFERENCE NO.: 118:45211a,45214a
TITLE: Relationship between chemical properties and biological properties of pyridoxalated hemoglobin-polyoxyethylene
AUTHOR(S): Iwashita, Yuji
CORPORATE SOURCE: Cent. Res. Lab., Ajinomoto Co., Inc., Kawasaki, Japan
SOURCE: Biomaterials, Artificial Cells, and Immobilization Biotechnology (1992), 20(2-4), 299-307
CODEN: BACBEU; ISSN: 1055-7172
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Pyridoxalated Hb-polyoxyethylene (PHP) is a conjugate of human Hb with α- **carboxymethyl**, ω-carboxymethoxypolyoxyethylene (POE). This conjugate is selected as an oxygen carrier for blood substitute because it can survive for a long time in the circulation and also it can transport the same amount of oxygen as red cell. Optimization of PHP has been done by changing the degree of the modification and reaction procedures in order to adjust viscosity and colloid osmotic pressure to physiol. values. The oxygen carrying capacity was phys. evaluated by oxygen equilibrium curves and biol. by an ATP content in perfused isolated liver. Structural relationship of PHP to the binding properties to haptoglobin was studied and the effect of the POE modification on the binding properties was observed when the number of POE per one Hb mol. is over six. Based on the comparative study of solubility of met-PHP and met-SFH, the POE modification was suggested to reduce the toxicity of Hb against organs. Finally phys. properties of PHP at low temperature was discussed in relation to organ preservation.

L6 ANSWER 39 OF 46 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1991:663075 CAPLUS
DOCUMENT NUMBER: 115:263075
ORIGINAL REFERENCE NO.: 115:44577a,44580a
TITLE: Skin cosmetics containing modified transglutaminase
INVENTOR(S): Mori, Kenji; Miyamoto, Tatsu; Nakayama, Hiroshi
PATENT ASSIGNEE(S): Kanebo, Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 03083908	A	19910409	JP 1989-220789	19890828
PRIORITY APPLN. INFO.:			JP 1989-220789	19890828

AB Skin cosmetics contain transglutaminase (EC 2.3.2.13) (I) modified with H2O-soluble substances. The cosmetics show good skin-conditioning and moisturizing effects and are stable and less irritating to the skin. Polyethylene glycol (II) (5.0 g) was treated with 0.6 g p-nitrophenyl chloroformate, CH3CN, and Et3N at room temperature for 24 h to give 4.5 g activated II. Liver (500 g) of guinea pigs was homogenized in aqueous sucrose solution, centrifuged, and the supernatant was purified to give I, which (50 mg) was treated with 100 mg the activated II in phosphate buffer at room temperature for 24 h and treated with 0.5 g glycine to give modified I. Liquid paraffin 35.0, cetyl alc. 5.0, polyoxyethylene sorbitan monooleate 7.0,

H2O 51.4, methylparaben 0.1, and the modified I 1.5 weight% were mixed to give a skin cream.

L6 ANSWER 40 OF 46 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1990:545326 CAPLUS
DOCUMENT NUMBER: 113:145326
ORIGINAL REFERENCE NO.: 113:24489a,24492a
TITLE: Virucides containing sulfated **carboxymethyl** polysaccharides
INVENTOR(S): Kido, Yasuhito; Yoshida, Osamu; Mizukoshi, Mikio; Yamamoto, Naoki
PATENT ASSIGNEE(S): Fujirebio, Inc., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 4 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 02178229	A	19900711	JP 1988-329351	19881228

PRIORITY APPLN. INFO.: JP 1988-329351 19881228

AB Virucides, which are especially useful for treatment of human immunodeficiency virus (HIV) infection and have low toxicity, contain sulfated **carboxymethyl** polysaccharides. Freeze-dried 100 mg C 5013 (CMC) was refluxed with HSO3Cl in pyridine for 3 h, filtered, and treated with 0.1N NaOH to give 50 mg CMC Na salt sulfate, which at 2.0 μg/mL showed virucidal effect in MOLT-4 and MOLT-4/HIV cell system.

L6 ANSWER 41 OF 46 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1979:184626 CAPLUS
DOCUMENT NUMBER: 90:184626
ORIGINAL REFERENCE NO.: 90:29321a,29324a
TITLE: Preparation of functionalized derivatives of **inulin**: conjugation of erythrocytes for hemagglutination and plaque-forming cell assays
AUTHOR(S): Chien, C. C.; Lieberman, Rose; Inman, John K.
CORPORATE SOURCE: Natl. Inst. Allergy Infect. Dis., NIH, Bethesda, MD, USA
SOURCE: Journal of Immunological Methods (1979), 26(1), 39-46
CODEN: JIMMBG; ISSN: 0022-1759
DOCUMENT TYPE: Journal
LANGUAGE: English

AB A method is described for preparing derivs. of alkali-stable polysaccharides for coupling to immunogen carriers or to sheep red blood cells (SRBC) for use in hemagglutination (HA) and plaque-forming cell assays. **Inulin**, a β(2 → 1)-linked polyfructosan was partially derivatized with carboxyl, aminoethyl, or (p-aminophenyl)butyryl groups; the latter derivative was coupled to SRBC following diazotization. Optimal conditions for the sensitization of SRBC with **inulin** were given. The immunol. reactivity of the **inulin** mol. was unaffected by the derivatization reactions, and high, reproducible anti-**inulin** HA titers for **inulin**-binding myeloma proteins were found using these specifically sensitized SRBC. The sensitized SRBC were stable for assays for over 2 wk. Problems with spontaneous agglutination or distortion of sensitized SRBC, normally seen in other procedures, e.g., methods using stearoyl-**inulin**, were not encountered.

L6 ANSWER 42 OF 46 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1973:111644 CAPLUS
DOCUMENT NUMBER: 78:111644
ORIGINAL REFERENCE NO.: 78:17935a,17938a
TITLE: Preparation of carbonates of polysaccharides and cycloamyloses
AUTHOR(S): Kennedy, J. F.; Tun, H. Cho
CORPORATE SOURCE: Dep. Chem., Univ. Birmingham, Birmingham, UK
SOURCE: Carbohydrate Research (1973), 26(2), 401-8
CODEN: CRBRAT; ISSN: 0008-6215
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The preparation of H2O-insoluble carbonates of cellulose, diethylaminoethyl-cellulose, nigeran, and xylan, containing trans-2,3-carbonate groups, is described. The occurrence of a carbonyl peak in the ir spectrum of **inulin** carbonate at 1820 cm-1, in addition to one corresponding to acyclic carbonate (O-ethoxycarbonyl, 1750 cm-1), was attributable to formation of the strained trans-4,6-carbonate group on the fructofuranose residues of the **inulin** chain, in addition to the formation of the trans-2,3-carbonate group on the relatively small number of terminal D-glucopyranose residues. The relative contents of acyclic carbonate of the products appeared to be a function of the reaction conditions rather than the availability of a free hydroxyl group at C-6. The presence of carboxyl groups in **carboxymethylcellulose** and alginic acid prevented the formation of trans and cis-2,3-carbonate groups, resp., but derivatization of alginic acid propylene glycol ester was successful. Specialized procedures were required for the isolation of cyclohexaamylose and cycloheptaamylose carbonates.

L6 ANSWER 43 OF 46 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1973:1724 CAPLUS
DOCUMENT NUMBER: 78:1724
ORIGINAL REFERENCE NO.: 78:295a,298a
TITLE: Estimation of glomerular filtration rate from plasma clearance of 51-chromium edetic acid
AUTHOR(S): Chantler, C.; Barratt, T. M.
CORPORATE SOURCE: Dep. Immunol., Inst. Child Health, London, UK
SOURCE: Archives of Disease in Childhood (1972), 47(254), 613-17
CODEN: ADCHAK; ISSN: 0003-9888
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The glomerular filtration rate obtained by the rate of decrease of plasma edetic acid-51Cr (I) was reproducible and could be correlated with the standard **inulin** clearance test. The method required an i.v. injection of I and blood samples at 2 and 4 hr. It is simple and can be applied to children for the management of renal disease.

L6 ANSWER 44 OF 46 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1969:71057 CAPLUS
DOCUMENT NUMBER: 70:71057
ORIGINAL REFERENCE NO.: 70:13327a,13330a
TITLE: Ytterbium-169 diethylenetriaminepentaacetic acid complex. Radiopharmaceutical for brain scanning
AUTHOR(S): Hosain, Fazle; Reba, Richard C.; Wagner, Henry N.
CORPORATE SOURCE: Johns Hopkins Med. Inst., Baltimore, MD, USA
SOURCE: Radiology (Oak Brook, IL, United States) (1968), 91(6), 1199-203, 1194
CODEN: RADLAX; ISSN: 0033-8419
DOCUMENT TYPE: Journal
LANGUAGE: English

AB 169Yb is a γ-emitting isotope with a 32-day phys. half-life; the photons between 160 and 220 kev. are suitable for brain scanning. 169Yb was chelated with diethylenetriamine-pentaacetate (DTPA); 99% of the i.v. injected dose of the complex was excreted rapidly within 1 day; the remaining 1% was eliminated at a slower rate. The clearance of the complex resembles that of **inulin**-14C; this finding suggests that it was excreted almost entirely by glomerular filtration. In black mice with exptl. ependymonas, the ratio of 169Yb-DTPA in the tumor compared with brain was greater than 20:1 shortly after i.v. injection. The agent was nontoxic and the radiation dose was comparable with that of other agents. After initial expts. in animals, preliminary trials of its use as a brain-scanning agent were begun. Images comparable with tellurium-99m tetroxide were obtained in patients with brain tumors. 169Yb-DTPA has a long shelf-life and a short biol. half-life; it may replace 203Hg-chlormerodrin as a brainscanning agent.

L6 ANSWER 45 OF 46 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1963:437276 CAPLUS
DOCUMENT NUMBER: 59:37276
ORIGINAL REFERENCE NO.: 59:6746b-c
TITLE: Cellulose decomposing organisms. IV. Factors affecting the formation of cellulase. 2
AUTHOR(S): Ikemiya, Masayuki; Yagi, Juichiro; Osumi, Takaharu
CORPORATE SOURCE: Univ. of Nebraska, Lincoln
SOURCE: Hakko Kogaku Zasshi (1961), 39, 586-90
CODEN: HKZAA2; ISSN: 0367-5963
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
AB cf. CA 59, 1983d.-Ammonia was better than nitrate N as an inorg. N source; (NH4)2SO4 was the best. Peptone, glycine, alanine, and asparagine were the best organic N sources. As the C source, cellobiose, cellulose, **inulin**, dulcitol, and rhamnose were good; soluble starch, glucose, sucrose, and **carboxymethyl** cellulose stimulated the growth of the microorganisms but were not good for cellulase formation. In the range of 0.05-4% of cellulose concentration, the lower concentration gave the higher fermentation rate. Processed cellulose was more readily decomposed than unprocessed or natural cellulose. Among metallic ions, Mo+++ increased the fermentation best, followed by Fe++ while Hg and Ag ions inhibited it.

L6 ANSWER 46 OF 46 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1961:15265 CAPLUS
DOCUMENT NUMBER: 55:15265
ORIGINAL REFERENCE NO.: 55:3014f-h
TITLE: Medicinal preparations with increased ability to enter the lymphatic system
INVENTOR(S): Hoffman, Josef; Malek, Prokop; Herold, Milos; Capkova, Jirina; Hermansky, Miroslav; Vondracek, Miloslav; Kolc, Jiri
DOCUMENT TYPE: Patent
LANGUAGE: Unavailable
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CS 90980		19590715	CS	

AB If some compds., e.g. antibiotics streptomycin, dihydrostreptomycin, streptothricin, neomycin, viomycin, some alkaloids, local anesthetics, basic cytostatics, antihistaminics, etc., are used in the form of their

salts with high mol. weight anions containing COOH groups, the ability to enter the lymphatic system increases. For example, streptomycin sulfate (10 g., 756 I.U./mg.) was dissolved in 14 ml. H_2O and sterile solution mixed with a sterile solution of 15 g. Na **carboxymethyl** amylose, and lyophilized to give a product of potency 325 I.U./mg. Also, a solution of 25 g. ester-acid obtained by reaction of dextran with succinic anhydride was adjusted to pH 6.5 with 14.2 g. dihydrostreptomycin sulfate, and worked up as above. A solution of 10 g. viomycin sulfate (590 I.U./mg.) was mixed with a Na **carboxymethyl** derivative (I) of a partially decomposed cherry tree resin, the product separated, decanted, and dissolved in a 9% solution of

I

to give a solution of potency 30,000 I.U./ml. Powdered morphine-HCl (5 g.) was treated with 12.5 g. dry powdered acid Na **carboxymethylated inulin.** The homogeneous powder, when dissolved, gave a preparation convenient for parenteral administration.